

**APPROVED**  
By Management Review Board  
Date JUN 24 1985

PROJECT PLANNING REPORT

Rocky Mount, Nash County  
SR 1770 (Sunset Avenue)  
From SR 1659 (Woodruff Road) to Crescent Avenue  
State Project 9.8043167  
U-1154 T

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Submitted to  
Planning Board  
by  
Planning and Research Branch  
Division of Highways  
N. C. Department of Transportation

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July, 1985

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### Description

This report covers the proposed widening of an 0.8-mile section of SR 1770 between SR 1659 and Crescent Avenue in Rocky Mount (see attached map). The project is included in the Statewide Urban Construction Program.

### Existing Conditions

SR 1770 is designated as a major thoroughfare in the Rocky Mount Thoroughfare Plan. It serves as a major radial into Rocky Mount from growing outlying areas to the west. Current traffic volumes on the subject section of road vary from approximately 12,000 vehicles per day just west of SR 1659 to 22,000 vpd east of Crescent Avenue. Estimated traffic volumes for year 2005 are 22,000 and 39,000 vpd, respectively. Approximate truck composition is 0-1 percent TTST and 2 percent dual tired trucks.

The studied facility has a 4-lane, 44-foot curb and gutter roadway constructed within a 60-foot right of way. To the west, it adjoins a 5-lane, 64-foot curbed section which extends for approximately 0.4 mile through the SR 1613 intersection. East of Crescent Avenue, the facility widens to a four-lane divided section.

A mixture of extensive commercial, office, institutional, educational, and residential development line both sides of the road. Development includes a shopping center, three churches, and an elementary school.

Present speed limit in this area is 35 MPH. A traffic signal is in place at Circle Drive. Overhead utility lines abut both sides of the road just behind the curbs.

### Recommendations & Cost Estimates

Planning and Research concurs with the Division Engineer's proposal to widen the subject section of road to 59 feet face to face of curbs. The additional width would enable provision of a continuous center lane to accommodate left turns at major intersections and commercial driveways. The additional lane is needed to separate the congestive left turning traffic from the through traffic. Two of the existing four lanes are frequently blocked by traffic waiting to turn left. The additional lane

would significantly improve traffic flow and safety and provide continuity of existing five-lane sections in the area.

Four alternate designs for widening of SR 1770 were prepared by Roadway Design. A brief description and cost estimate of each alternate are as follows:

<u>Alternate 1 - all widening on north side</u>	
Roadway Cost	\$ 434,000
Right of Way Cost	548,000
Total Cost	<u>\$ 982,000</u>

<u>Alternate 2 - Symmetrical widening</u>	
Roadway Cost	\$ 489,000
Right of Way Cost	409,000
Total Cost	<u>\$ 898,000</u>

<u>Alternate 3 - combination of Alternates 1 and 2</u>	
Roadway Cost	\$ 463,000
Right of Way Cost	505,000
Total Cost	<u>\$ 968,000</u>

<u>Alternate 4 - all widening on south side</u>	
Roadway Cost	\$ 457,000
Right of Way Cost	369,000
Total Cost	<u>\$ 826,000</u>

The above roadway cost estimates include 10 percent for engineering and contingencies. Right of way costs are based on acquiring 15 feet of additional right of way plus easements.

On the basis of the lowest overall cost, Alternate 4 is the recommended scheme. According to the Division Engineer, the City of Rocky Mount has agreed to reimburse DOT to the extent of \$150,000 toward the cost of acquiring the right of way. Thus, the net total cost of the recommended improvements to DOT is approximately \$676,000.

#### Environmental Evaluation

The nature and magnitude of the proposed project should not produce any significant adverse effect on the environment. The project involves an improvement of a well established highway.

Construction of an additional lane should have a positive impact on the area by providing better and safer traffic operation.

The project could accelerate urbanization of adjacent undeveloped properties but would be compatible with any land development plan for the area and improve service to various land uses.

Due to the urban development of the area, the proposed improvements should have no significant effect on animal or plant life. It does not

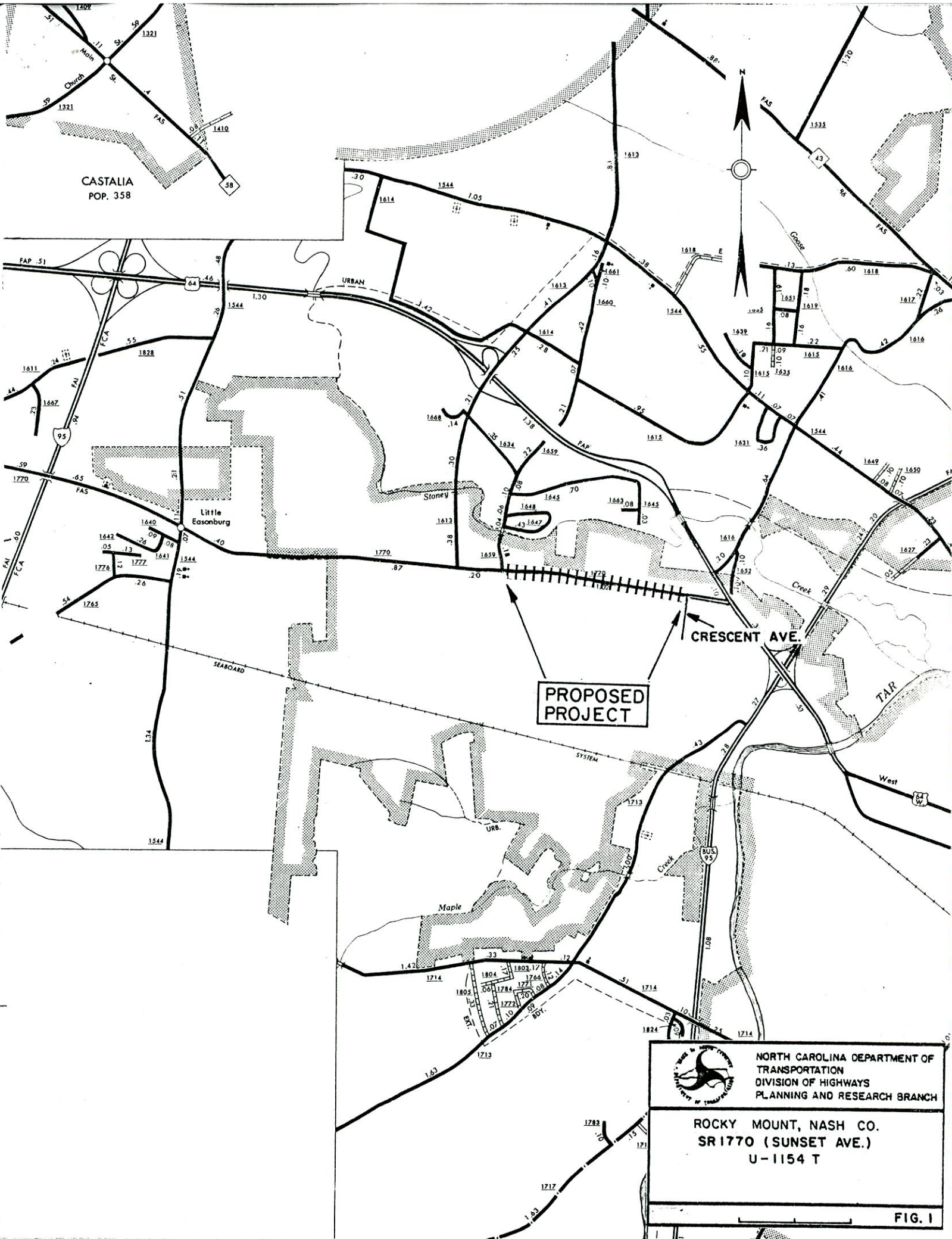



involve any habitat for endangered or threatened species, archaeological or historical sites, wetlands, or floodplains.

No displacement of any residence or business is required. Some trees and lawns may be removed by the proposed widening, but existing aesthetic quality would not significantly be affected. Possible siltation of adjacent properties may occur during construction of the project but will be minimized by use of standard erosion control methods.

Since the proposed project only involves the addition of a turn lane, no significant increase in traffic volumes or change in traffic patterns is expected. Thus, noise levels and air pollution by vehicular exhaust emissions would remain basically unchanged.

RGD/sdt



 NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION  
DIVISION OF HIGHWAYS  
PLANNING AND RESEARCH BRANCH

ROCKY MOUNT, NASH CO.  
SR 1770 (SUNSET AVE.)  
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FIG. 1